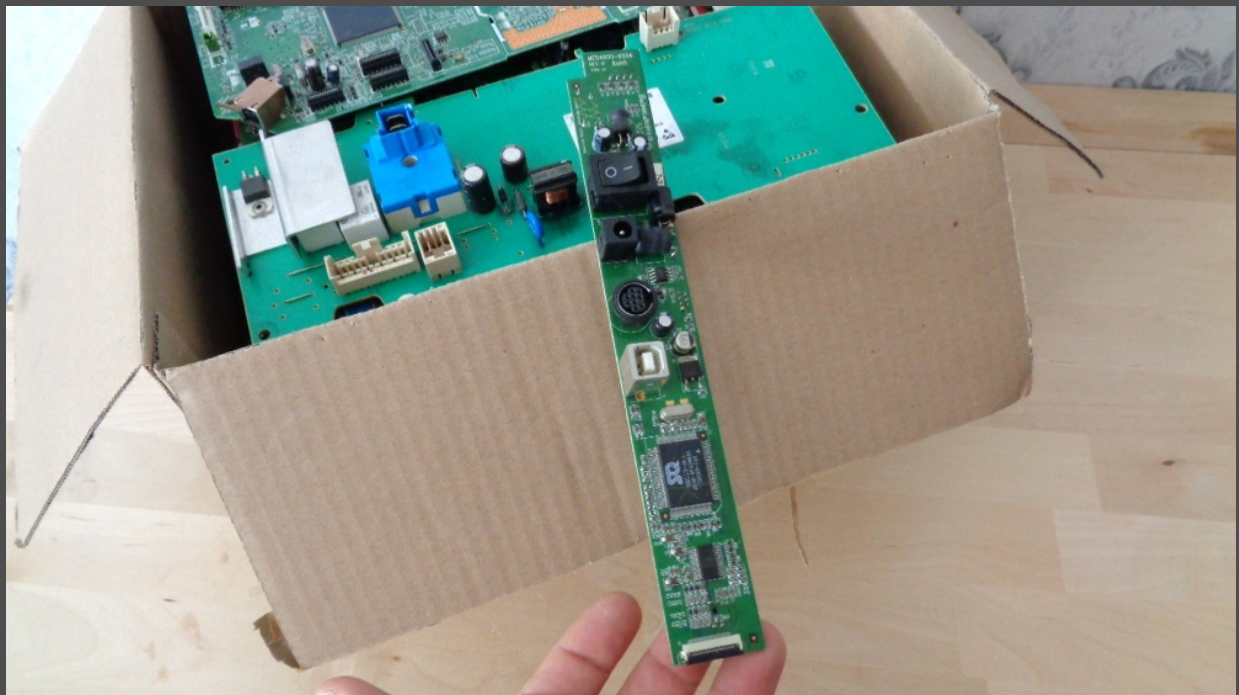


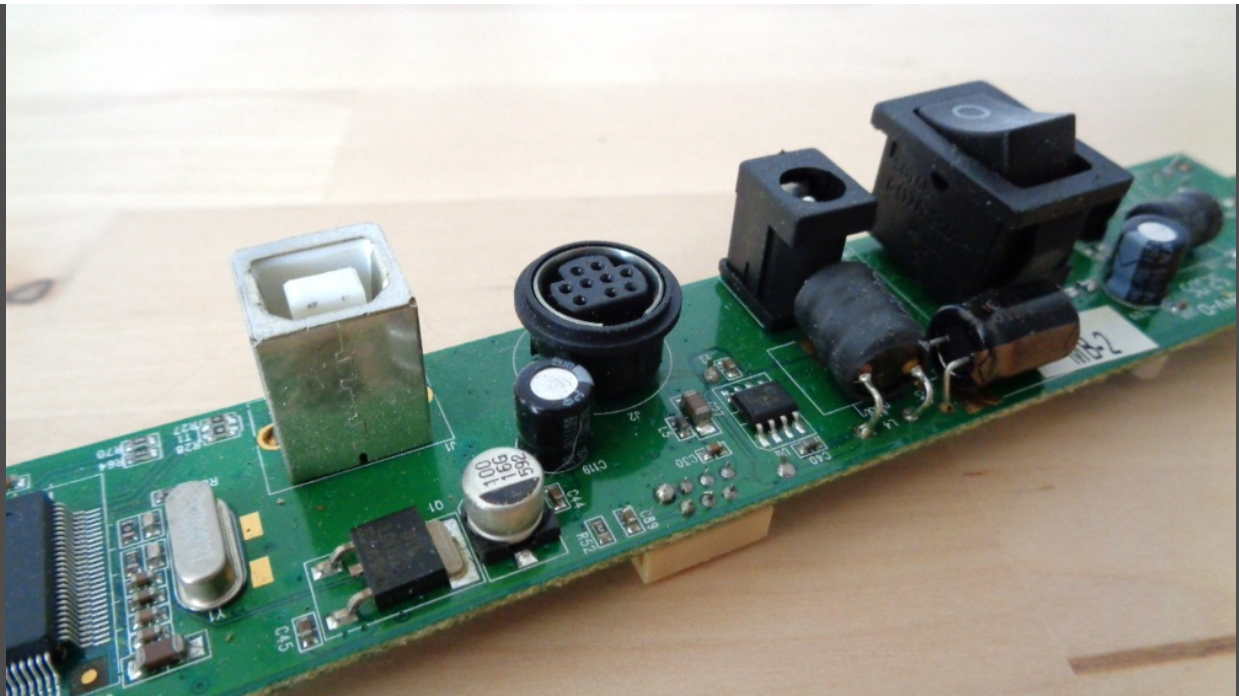


### Heat gun desoldering

Often enough it happens with my projects that I need certain components quickly. To order them in the online shop or to buy them in the city centre usually takes too long. For such a case I always have old circuit boards from computers, radios or other electronic scrap in a box. I can use these to solder off the required components. I already tried some techniques and after some time I stayed with the hot air gun. With this I get the best results. I am described here in this article, how I proceed best thereby. For the implementation we need old PCBs, a hot air pistol, goggles, pliers and a parallel vice.



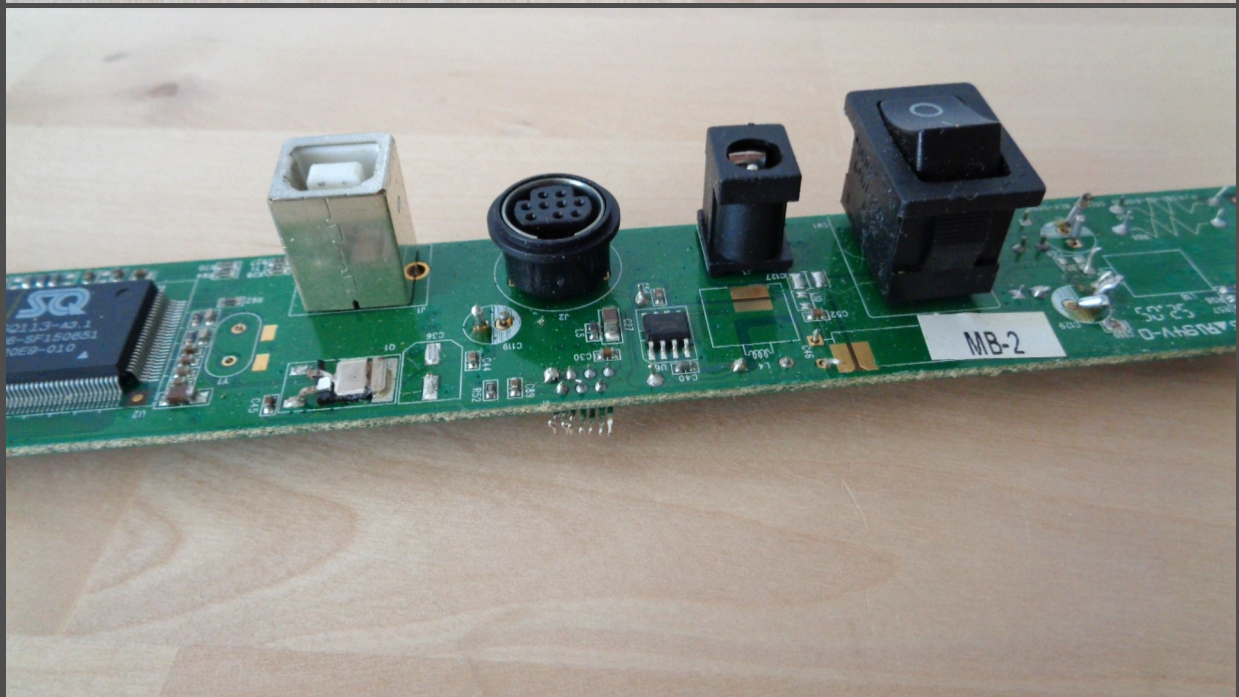
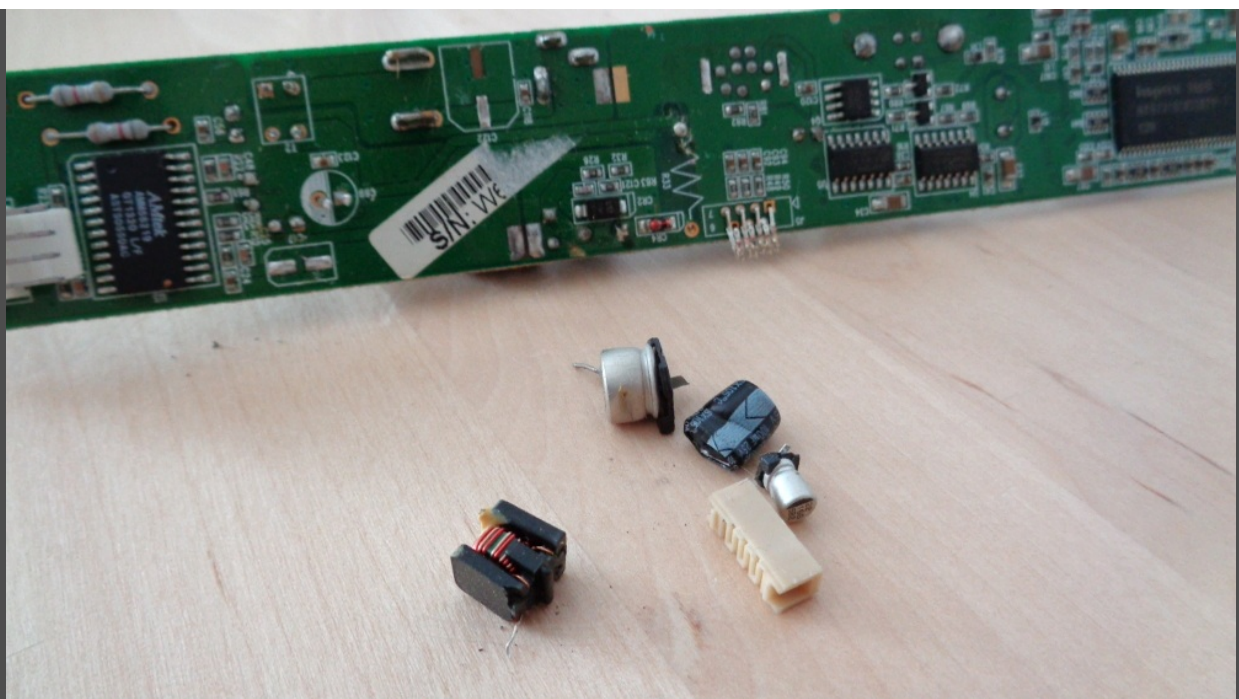
First we look for the PCB on which the parts were processed. Altogether, almost all components can be desoldered with a hot air gun. You only have to be more careful with the pincers and take a closer look at the small components. Since this work produces toxic fumes, it is best to work in the garden, garage or in a well-ventilated study. We need protective goggles because sometimes old solder can splash into the eyes when removing the components.



Before I clamp a PCB into the parallel vice, I take a closer look at the surface. Sometimes there are components in the wrong places that are disturbing. I loosen them with a flat pair of pliers and simply break them off. Most of the time they break and I throw them into the trash. But I try to use the material as sparingly as possible, because what was once thrown away cannot be retrieved. Also, you can't repair most of the parts yourself if they get damaged when you break them off. Actually, we would have to rethink this a little and perhaps develop a modular system.







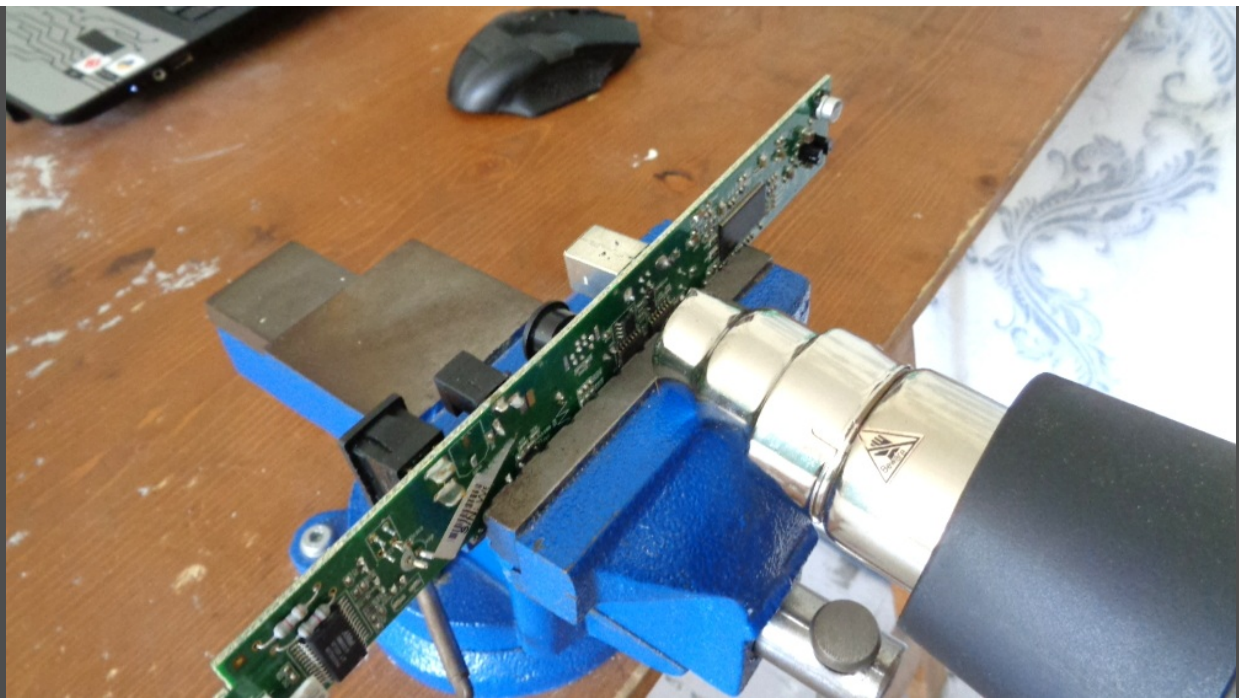
After we had broken off all unnecessary components, we clamp the PCB into the parallel vice. We make sure that the PCB is really clamped and cannot fall out during work. Since the vice and the circuit board can heat up strongly by the hot air pistol, we should not touch them when desoldering, otherwise we can burn ourselves. We also make sure that plastic parts are not hit too much by the hot air and do not melt. This produces the most toxic fumes and we want to avoid that.



Now comes the difficult part (on the photos I can't show it well because I don't have three hands). With the left hand we take the flat pliers and hold the component we want to desolder. We make sure that the component is not crushed and breaks. With the right hand we take the hot air gun, switch it on and hold it to the bottom of the board. Exactly where the component is. So we can remove the component to the left and can't reach the hot gun with our arm. The first time it may still be exhausting, but after some time you can learn it quickly.







As you can see on the photo, with this technique it is very well possible to desolder components. Unfortunately toxic fumes are produced and you should only do this in an emergency if you need components very quickly. But it also helps to protect the environment a little, because you don't always have to buy new material immediately. As I already mentioned in the text above, people would have to completely rethink circuit boards.

